



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/543,653	04/05/2000	Tetsuya Kawamoto	8041.093US0	6925

22434 7590 11/01/2002

BEYER WEAVER & THOMAS LLP
P.O. BOX 778
BERKELEY, CA 94704-0778

EXAMINEE

EASTHOM, KARL D

ART UNIT	PAPER NUMBER
----------	--------------

2832

DATE MAILED: 11/01/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/543,653

Applicant(s)

Kawamoto et al.

Examiner

Karl Easthom

Art Unit

2832



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.

If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.

If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.

Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on May 15, 2002

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1, 6, 8, and 21-33 is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1, 6, 8, and 21-33 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☒ All b) ☐ Some* c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1. Notice of References Cited (PTO-892)

4. Interview Summary (PTO-413) Paper No(s):

2. Notice of Draftsperson's Patent Drawing Review (PTO-948)

5. Notice of Informal Patent Application (PTO-152)

3. ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8 and 20

6. Other:

Art Unit 2832

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States

2. Claims 1, and 21-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Salera. Salera discloses the claimed invention at Fig 7 with sensing element 17, electrodes 20,21 cover 16 and lead lines 22, 23 seen partly covered by 16 at Fig. 7 adjacent embedded part 20,21, with kinked part 22b or 23b. Or cover 116 covers part of 22,23 but not the kinked part. In claim 22, the bend is in the same outward direction.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 8, 21-22 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hofsass or Nakamura et al., in view of Kaneko et al., Saito et al., or Stross. Hofsass discloses the claimed invention at Figs. 2b and 4 except the semi circular bend or kink part. In Hofsass, the electrodes are 3, with leads 23 attached by solder 16 (see col 4) or welding, with the cap 38 depicted at Fig. 4 as the insulating cover. Similar remarks apply to the Nakamura device with temperature sensing element 1, electrodes H and insulating covering 1 as seen in Figs. 3, 5 and 6. Kaneko discloses employing the claimed semi-circularly formed kink or bend 8 at Fig. 5 (co. 4) in the leads for the purpose of forming determining the end of insertion of the

Art Unit 2832

device, such that it would have been obvious in to employ same in the leads of Hofsass for the stated purpose. Saito discloses bends or kinks at Fig. 4 for circuit board attachment for any electronic component. In claim 22, the same direction is the outward direction where both are bent in the same outward direction – radially from a center line between the device – as to Kaneko, or upwards as to Saito et al. In claim 25, Nakamura discloses the device can be NTC, or PTC, at col. 1, and it would have been obvious to employ either one for temperature sensing where there are only the two well known types. Stross discloses a kink 33 at Fig. 5 for the purpose of firmly attaching a circuit component to a board, such as the devices of Hofasass or Nakamura et al., rendering such a kinked part obvious for that purpose. Each kink or curve appears to be a semicircle, such that it would have been obvious to form a semicircle given the close appearance to one.

5. Claims 6, and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Salera; or Hofsass or Nakamura et al., with Kaneko et al., Stross or Saito et al.; as applied to claims 1 and 21-22 above, and further in view of Clem. The noted art discloses the claimed invention except the material of the leads. Clem discloses the material as noted above for lead attachment to a thermistor, and it would have been obvious to employ the well known material for good lead attachment where thermistors are employed.

6. Claims 26, 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko et al. in view of Hofsass. Kaneko discloses the claimed invention at Fig. 5 except the element being temperature sensing and having electrodes. Hofsass discloses the claimed invention at Figs. 2b and 4. In Hofsass, the electrodes are either 2,3, or solder 16, with leads 23 attached by (see col. 4) welding, with the cap 38 depicted at Fig. 4 as the insulating cover. It would have

Art Unit: 2832

been obvious to attach leads by solder to electrodes for the purpose of making good contact thereto. In Kaneko, the part 8 is a semicircle between two collinear portions, where the end is cut somewhere along 4c.

7 Claims 27, and 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko et al. in view of Hofsass, as applied to claims 1 and 21-22 above, and further in view of Clem. The noted art discloses the claimed invention except the material of the leads. Clem discloses the material as noted above for lead attachment to a thermistor, and it would have been obvious to employ the well known material for good lead attachment where thermistors are employed. For claim 33, Clem discloses negative and positive thermistors at col. 2 for motor protection such that it would have been obvious to employ the known type of thermistor where Hofsass discloses a thermistor for motor protection made similarly to the electronic unit of Kaneko. In claim 30, the kinks are bent in the same outward direction – out from the center.

8 Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

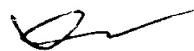
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit 2832

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9 Applicant's arguments filed 9/10/02 have been fully considered but they are not persuasive. Applicant argues that the the kinked parts 22b, 23b of Salera are not semicircular. This is not correct, because in part it comprises a semicircular part. The Kaneko crimp 8 appears semicircular, or one is an obvious modification where the crimp part is between two collinear portions. Similar remarks apply to Stross or Saito which disclose elements that are either semicircular or appear so.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl D Easthom whose telephone number is 703 308-3306. The examiner can normally be reached on M-Th, 5:30AM-4:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 703 308-7619. The fax phone numbers for the organization where this application or proceeding is assigned are 703 308-7722 for regular communications and 703 308-7722 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-0956.



Karl D Easthom
Primary Examiner
Art Unit 2832

KDE
May 13, 2002